MISCELLANEOUS NOTES

2. ON THE OCCURRENCE OF HORSFIELD'S SHREW, CROCIDURA HORSFIELDI (TOMES) IN PENINSULAR INDIA

While making a collection of small mammals for chromosomal analysis, we came across a few individuals of small shrews under litter, grass heaps and other waste materials in the University campus (Manasa Gangotri, Mysore, S. India) in July 1976. These specimens were identified by the British Museum (Natural History), London, as *Crocidura horsfieldi* Tomes. Ellerman and Morrison-Scott (1951) have mentioned the approximate distribution of this species in Ceylon, Kashmir, Indo-China, Siam, Northern Burma and Liukiu Islands (page 75). The occurrence of this

genus has not so far been recorded from peninsular India and this is the first report of the occurrence of this species from this region. This species resembles the pygmy shrew, Suncus etruscus in appearance. But, Crocidura horsfieldi is slightly larger than Suncus etruscus in size. The average body measurements of the Horsfield's shrew, Crocidura horsfieldi are: Head and body = 61 mm; Tail = 47 mm; Hind foot = 11 mm; and Ear = 7 mm. So far fifteen specimens of both the sexes have been collected in the environs of the University campus.

DEPARTMENT OF ZOOLOGY, UNIVERSITY OF MYSORE, MANASA GANGOTRI, MYSORE 570 006, November 17, 1977. S. KRISHNA RAO N. V. ASWATHANARAYANA

3. PARTURITION IN THE INDIAN RUFOUS BAT, RHINOLOPHUS ROUXI (TEMMINCK)

The natural inverted resting posture of the bats has resulted in unique behavioural adaptations of these animals during parturition and makes the study of this process a very fascinating one since the young has to be ejected against gravity. Unfortunately the details of this interesting aspect of the biology of the bats is known with respect to very few species although this is one of the largest groups among mammals including over a hundred genera and several hundreds of species (Simpson 1945). Even among the few species of bats in which parturition has been studied there are interesting differences with regard to the posture the mother assumes during labour and the behaviour of the mother and the young

one during and immediately after delivery. Whereas delivery occurs while the mother hangs in the normal inverted posture in a few species (Ramakrishna 1949, 1950; Gopalakrishna et al. 1976) the mother normally reverses her natural posture during delivery in Myotis lucifugus lucifugus (Wimsatt 1960). In Pipistrellus ceylonicus chrysothrix (Gopalakrishna & Madhavan 1972) and some times in Myotis lucifugus lucifugus (Wimsatt 1960) the mother hooks her toes and also her wings to the ceiling so that her body assumes a cradle-like structure during labour. Further, while in most cases the young are delivered by breech presentation (Sherman 1930, 1937; Wimsatt 1945, 1960; Gopalakrishna & Ma-